

Date June 2, 1999

From

FULBRIGHT & JAWORSKI L.L.P.

200 Ross Avenue, Suite 2800

Dallas, Texas 75201

214/855-8000

PATENT APPLICATION TRANSMITTAL LETTER"Express Mail" label no. EL315108421USDate of Deposit: June 2, 1999

Box PATENT APPLICATION
 Assistant Commissioner
 for Patents
 Washington, D.C. 20231

I hereby certify that this is being deposited with the United States Postal Service Express "Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

By: Elva WilsonPrinted/Typed Name: Elva Wilson

Sir:

Transmitted herewith for filing under 37 C.F.R. 1.53(b) is a(n):

- ☒ Utility
☒ Original patent application,

Inventor(s): **Salim G. Kara**For: **VERIFYING THE AUTHENTICITY OF PRINTED DOCUMENTS**

Enclosed are:

1. ☒ 25 pages of written description, claims and abstract.
2. ☒ 9 sheets of drawings.
3. ☒ Combined Declaration and Power of Attorney.
 - (a) ☒ Newly executed (original or copy)
 - (b) ☐ Copy from prior application (37 CFR 1.63(d))

(for continuation/divisional if Box 5 completed)

[Note Box 5 below]

4. ☐ Incorporation by Reference (useable if Box (b) is checked).

The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 3(b), is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.

5. ☐ If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:

☐ Continuation ☐ Divisional ☐ Continuation-in-part (CIP) of prior application No: ____/____.

6. ☐ Assignment Papers (cover sheet and document(s)) of the invention to
7. ☒ A verified statement to establish small entity status under 37 CFR 1.9 and 37 CFR 1.27.
8. ☐ Information Disclosure Statement and Form PTO-1449. ☐ Copies of IDS Citations.
9. ☐ Preliminary Amendment

Date June 2, 1999

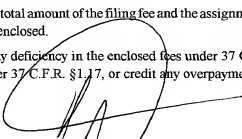
10. ☒ Return Receipt Postcard (MPEP 503) (should be specifically itemized)
11. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed)
12. ☐ Other: _____

13. Utility Fee Calculation

CLAIMS AS FILED			
Fee for:	Entity		Amount
	<input checked="" type="checkbox"/> Small	<input type="checkbox"/> Other	
Basic fee	\$380.00	\$760.00	\$380.00
Each independent claim in excess of 3	5 x \$39.00	[x \$78.00	\$195.00
Each claim* in excess of 20	44 x \$ 9.00	[x \$18.00	\$396.00
Multiple dependent claim (one-time fee)	\$130.00	\$260.00	\$0.00
*Including the total number of claims to which direct reference is made in all multiple dependent claims		TOTAL FILING FEE	\$971.00

Method of Fee Payment

14. ☒ A check in the amount of \$971.00 to cover the filing fee is enclosed.
15. ☐ A check in the amount of \$40.00 to cover the assignment recordal fee is enclosed.
16. ☐ Please charge my Deposit Account No. 06-2380 in the total amount of the filing fee and the assignment recordation fee, if any. A duplicate of this Transmittal Letter is enclosed.
17. ☒ The Commissioner is hereby authorized to charge any deficiency in the enclosed fees under 37 C.F.R. §1.16, or to charge any patent application processing fees under 37 C.F.R. §1.17, or credit any overpayment, to Fulbright & Jaworski L.L.P. Deposit Account No. 06-2380.


 David H. Tannenbaum
 Reg. No. 24,745
 Counsel for Applicants

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

- ☒ In re application of Applicant or Patentee: Salim G. Kara
☐ Serial or Patent No.: Unknown
☒ Filed or Issued on: June 2, 1999

Title: VERIFYING THE AUTHENTICITY OF PRINTED DOCUMENTS

STATEMENT CLAIMING SMALL ENTITY STATUS
(37 CFR 1.9(f) and 1.27(b))--SMALL BUSINESS CONCERN

I hereby state that I am

- ☐ the owner of the small business concern identified below:
☐ an official of the small business concern empowered to act on behalf of the concern identified below:
☒ independent inventor(s) identified below:

I hereby state that the above identified small business concern qualifies as a small business concern, as defined in 13 CFR 121.12, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees to the United States Patent and Trademark Office under Sections 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third-party or parties controls or has the power to control both.

I hereby state that rights under contract or law have been conveyed to, and remain with, the small business concern identified above, with regard to the invention described in

- ☒ the specification filed herewith, with title as listed above.
☐ the application identified above.
☐ the patent identified above.

If the rights held by the above-identified small business concern are not exclusive, each individual, concern or organization having rights in the invention is listed below* and no rights to the invention are held by any person, other than the inventor, who would not qualify as an independent inventor under 37 CFR 1.9(c), if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e).

Each such person, concern or organization having any rights in the invention is listed below:

- ☒ No such person, concern, or organization exists.
☐ Each such person, concern or organization is listed below.

☒ INDIVIDUAL

☐ SMALL BUSINESS CONCERN

☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small business entity is no longer appropriate. (37 CFR 1.28(b))

- ☒ I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further, that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Name of Person Signing:

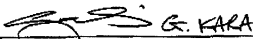
Salim G. Kara

Title of Person if Other Than Owner:

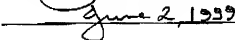
Address of Person Signing:

17 Bayview Forest Lane, Thornhill, Ontario, Canada L3T7S4

SIGNATURE:

 G. KARA

Date:

 June 2, 1999

VERIFYING THE AUTHENTICITY OF PRINTED DOCUMENTS

Salim G. Kara

17 Bayview Forest Lane
Thornhill, Ontario, Canada L3T7S4
Citizenship: Canadian

TECHNICAL FIELD

This invention relates to electronic commerce in general and in particular to a system and method for establishing the authenticity of a past electronic communication at the point of the consummation of the commercial endeavor which is the subject of the electronic communication.

BACKGROUND

Electronic commerce is everywhere now. People are using the Internet, as well as other remotely accessible locations, such as kiosks, to order goods and/or services. Some of these services require verification of prior payment and/or reservations at the time the service is being offered which typically is sometime after the actual purchase (or reservation) was made. For example, assume a person desires to reserve a seat on an airplane, or a room in a hotel, or a rental car, or a seat in a theatre, all from a remote terminal. Typically, that person would get into communication contact with a reservation system. This communication can be with a live person at the selling end or could be with a computer acting in an interactive mode or a combination of the two. The reservation would be made and arrangements would be made to pay for the reservation. Then the problem arises; how does the purchaser demonstrate to the gatekeeper at the airline (or to the rental car gatekeeper; or to the theatre usher) that the service has been paid for?

The obvious answer is that a ticket, or other indicia of the transaction, is printed at the purchaser's terminal and that printed ticket is used to identify that the services have been paid for. That might work when the paper stock that the receipt information is printed on is closely guarded and very distinctive. It will not work for obvious reasons where general purpose printers are used to print the receipt at the purchaser's premises.

If electronic commerce is to flourish then it is mandatory to have an arrangement whereby the purchaser can obtain immediately upon purchase a printed verification of the transaction in a manner which allows for universal printing while still allowing the printed receipt to act as a final verification of authenticity at the point where the actual services are rendered.

SUMMARY OF THE INVENTION

These and other objects, features and technical advantages of my invention have been achieved in one embodiment where a system and method is utilized for establishing a commercially available partially preprinted form where the form has printed on it information used by the service seller during the initial transaction communication period for establishing integrity control for subsequent verification. In one embodiment, the form is available to any purchaser for use with any general purpose printer operable in conjunction with a PC or other communication/computing device, including so called "dumb" terminals. This form is advantageously preprinted with both human readable data and machine readable data. As will be seen, the machine readable data, which I will call an indicia, contains key information which serves to help decode material that is subsequently printed on the form under control of the central validating system.

In operation, the purchaser enters into an interaction communication with the seller of the service. This may be, by way of illustration, from the purchaser's PC at his/her home via the Internet to a web site maintained by the seller. The user has obtained one or more preprinted paper forms from a supplier of forms. The weight of the paper is not critical and the forms may be any weight stock. The user inputs the human readable data from the exact preprinted form that the user intends to use. This input can be by verbally reading the data or by scanning the data or by any other system. In situations when there is no human readable material preprinted on the form, the user would scan in the machine readable portion. Some portion of the preprinted data is unique to the exact form selected by the user at that time.

The seller, upon receipt of the unique data from the user pertaining to the selected form, verifies that this exact form identification number has not been previously used. Since each preprinted form has a unique identification code, this initial screening process insures that a copy of the preprinted form is not being used. The seller then uses the unique identification number to establish an encryption code for printing on the form a machine readable security

indicia. It will be this security indicia that will subsequently be used in conjunction with the original preprinted indicia to verify the authenticity of the information to be printed on the form. The seller then sends information to user so that the user's printer will print on the form all of the information that will be used by the purchaser to subsequently obtain the service.

When the purchaser arrives at the location where the services are to be rendered (in our example, at the airport) the purchaser's form will contain luggage labels (printed when the security indicia was printed) and a boarding pass. A receipt will also be printed at the time the security indicia was printed. The boarding pass contains all of the information necessary to properly route the luggage to the final destination. This routing information may be both human readable and mechanically readable, perhaps in several different formats.

For verification of the authenticity of the boarding pass and/or the luggage tags, the original preprinted indicia is read to obtain a decryption key. This key is then used to decrypt information stored in the security indicia that was printed at the time the remainder of the form information was printed. If the key is not present on the preprinted form, or if the key differs from the key assigned to that form in conjunction with the human readable data that was inputted by the purchaser during the initial payment and/or scheduling session, then the data on the form will not be verified and the holder of the form (boarding pass) will be denied service.

Note that the printer can be any printing device for creating images on paper, or it could be a device for storing images which can later be displayed to obtain the goods and or services. For example, the image can be created into a memory and that memory can be later used to create a display, or to print a paper or other media copy, which is scanned or observed by a gatekeeper at the point where the services are to be rendered. The recreated image can be electronically scanned using the preestablished key to decode the newly created validity information. Such a system can be useful when a memory device, such as a smart card or PC, is used to gain access to a theatre, to rent a car or to board an airplane. In such a system, the memory device interacts with the seller of the service at an earlier point in time, usually several days or weeks earlier, and during that interaction availability of the service is confirmed, a

reservation is made, payment is arranged for, seat assignments issued, and images (or other forms of data) are recorded in the memory in a manner such that such images will not be verifiable unless they are decoded using some portion of the preestablished memory data.

5 The foregoing has outlined rather broadly the features and technical advantages of the present invention in order that the detailed description of the invention that follows may be better understood. Additional features and advantages of the invention will be described hereinafter which form the subject of the claims of the invention. It should be appreciated by those skilled in the art that the conception and specific embodiment disclosed may be readily utilized as a basis for modifying or designing other structures for carrying out the same purposes of the present invention. It should also be realized by those skilled in the art that such equivalent constructions do not depart from the spirit and scope of the invention as set forth in the appended claims.

BRIEF DESCRIPTION OF THE DRAWING

For a more complete understanding of the present invention, and the advantages thereof, reference is now made to the following descriptions taken in conjunction with the accompanying drawing, in which:

5 FIGURE 1 shows a sample preprinted blank form;

 FIGURE 2 shows the form of FIGURE 1 having created thereon luggage tags and a boarding pass;

 FIGURE 3 shows a typical user workstation;

 FIGURE 4 shows a typical seller work system;

 FIGURE 5 shows a typical point of sale verification system;

 FIGURE 6 shows a simple algorithm for authenticating the printed form;

 FIGURES 7A-7C show a series of preprinted blank forms; and

 FIGURES 8A-8D show tickets printed using the blank forms of FIGURES 7A-7C.

DETAILED DESCRIPTION

Turning now to FIGURE 1, form 10 is the original display media which, in one embodiment, can be ticket stock printed with indicia 16 thereon. Indicia portion 16a can be a machine readable portion of the indicia (which can be, for example a Universal Bar Code, an Internec Corporations' Code 49, or a Laser Light System Inc.'s Code 16K, or any other type of machine readable code) and portion 16b is a human readable portion. Note that for the purposes of this invention the indicia can be entirely machine readable or entirely human readable, if desired. In addition, the human readable portion could be a different form of the indicia, such as bar codes that can be machine readable. In the embodiment, form 10 is divided into sections 11, 12, 13, 14 and 15 each separable by perforated lines 102, 103, 104. These lines can be traditional perforations, or they can be simple folds. In some situations there need not be any perforations or folds.

As will be seen in FIGURE 2 for an airline ticket portion 13 of ticket stock 10 is printed with the necessary boarding information. In such a situation, section 14 would be the passenger's copy of the boarding pass, section 15 would be the passenger's receipt, and sections 11 and 16 would be the luggage tags that would be preprinted. Thus, the luggage tags can be removed from the printer and ticket stubs 13, 14 and 15 can be separated along the perforation lines. Paper on the backing of the ticket stub area (not shown) can be removed to reveal a portion which has a sticky substance thereon which would allow the tags to be placed in the traditional manner on the luggage to form a loop around the handle.

Turning now to FIGURE 3, a user using system 30 who has obtained one or more portions of ticket stock 10 places a ticket form or a series of ticket forms 10 in paper tray 360 of printer 36 which is connected to processor 33, which in turn accepts inputs back and forth between keyboard 32, display 31, scanner 34 and communication control 35. The user then makes communication contact with a seller (FIGURE 4) via communication control 35 and signal link 301. Signal link 301 could be wireless, wireline, or any other combination system. The internet can be used for this purpose or direct phone line connections combinations thereof. In a typical situation, software would be controlled by processor 33 and the user of

keyboard 32 and display 31 would interact with the seller at system 40 FIGURE 4 to arrive at a desired flight, cost, time, seat assignment, return trip or intermediate stops. This would all be accomplished in a well known fashion, either verbally on both parts, or by one or both parties communicating without the intervention of a human on either of both sides. The user at system 30 and the seller at system 40 come to a meeting of the minds with respect to the payment and other terms. The user at 30, either verbally or via scanner 34 (which can be part of printer 36 if desired) reads off the human readable portion of code 16b shown in FIGURE 1.

This data is communicated via link 301 to communication control 41 and processor 42. Processor 42 operates in conjunction with data base 43 and determines whether the code that has just been received from the preprinted form is a valid code. This determination can be based upon several factors, one factor being that the code has never been used before, thereby ensuring that it at least appears to be unique to this form. Also, the verification can determine whether the code number is within an acceptable range for this user. Various other parameters can be checked. In one embodiment, processor 42 working in conjunction with data base 43, would know that the original machine readable indicia on ticket stock 10 portion 16a has contained within it a particular key which had been preassigned prior to the printing of the ticket stock. Processor 42 then utilizes a coding algorithm which is secret to it, but which is based on the key contained in the original printed indicia. Utilizing this information, processor 42 formulates a printed message which is transmitted via communication channel 301 to FIGURE 3 system 30 and via communication control 35 to processor 33 which then controls printer 36 to print the ticket such as is shown in FIGURE 2.

Note that the printed ticket in FIGURE 2 has a second indicia 21 which is machine readable similar to indicia 16a and decodable only by utilizing the key which is contained in indicia 16a. Indicia 21 has been especially created by processor 42 in FIGURE 4 under control of the previously transmitted data from the buyer and will serve to verify the authenticity of the ticket when the user arrives at the terminal for boarding the airplane, or when the user, in another situation, arrives at a theater. The printed control indicia is

compared using the embedded key from the original indicia to decode the printed indicia to authenticate the validity of the ticket. As previously discussed, this can be used for renting cars where the actual information is given to the user preprinted ahead of time at the user's location and the printed indicia is used to allow the car to be removed from the lot via the mechanism above described. Note that more than one control indicia, or key indicia, can be printed on any form.

Turning now to FIGURE 5, when the user arrives at the point of utilization, i.e., the boarding gate of the airline, bus station, train station, or at the exit gate of the rental car agency, or at the entrance to the theater (so that the preprinted commercial transaction is about to be authenticated and the services actually rendered based upon a preestablished commercial transaction between the parties) reader 51 reads the information that is on the preprinted ticket including the original indicia 16a and the new indicia 21. This information is provided to processor 52 which then extracts the key from the data contained in indicia 16 for decoding the data in indicia 21, thereby enabling a determination that the passenger is okay to go, via display 54, or that the ticket is not valid, via display 55. Processor 52 can transmit and receive information via communication control 56 overlink 501 to communication control 41 in FIGURE 4. The purpose of this link can be two fold if desired. 1) When the initial transaction is consummated, processor 42 can operate to transmit the information via link 501 to processor 52 and its database (not shown) indicating that certain information has been printed on various tickets. This would serve as a further backup to the decision process at the time of offering of the services since the indicia that has been printed is expected at that period of time from the information given at the time of the booking. For example, seat information and other information including information pertaining to the printed indicia 21 can be communicated to processor 52 so that when printed indicia 21 is presented, processor 52 can utilize its intelligence to determine the validity of the printed indicia to further check that copies are not made and that the services are not given to the wrong person or to many people utilizing the same numbers.

This system cuts down on fraudulent operations and even if an unscrupulous operator were to make copies of a printed ticket, only one such ticket could be processed at processor 52 because the second one would block since it would no longer be valid for transport or for the rendition of services. Thus, the user of the ticket stock would be in no different position than if the user were to obtain a ticket and have somebody steal the ticket and/or copy the ticket, since control indicia 21 would only have been printed upon the consummation of a commercial transaction, which implies that a means of payment had been agreed upon between the parties.

Turning now to FIGURE 6, a simple flow chart is shown to show the operation just described and box 601 of the ticket is read and box 602 determines if the format of the entire ticket including indicia 16a and 21 is accurate and proper. In this respect there can be, if desired, interaction between information at the local service rendering position and the central data base box 604. If the format is wrong, the transaction is stopped via box 602. If the format is proper, then the original indicia is read box 603 to determine the key which would be used to decode indicia 21 prior to such utilization of the key. The key is checked via box 605 to determine if it is a valid key. Again this validity check can be done in cooperation with information received from the central data base, if desired, via box 604. If it is a valid key, then the key is used to decode the information from the printed indicia box 606 which provides information to processor 607 which verifies the authenticity of the data on the remainder of the ticket and determines (optional) if the parameters (time, date, sequence, etc.) are correct for the passenger of this receipt box 609. Again this information can be used to update the central processor if desired to maintain central control. Box 610 controls whether the bearer may board or enter the feeder or remove a car from the lot or any other commercial transaction controlled by the ticket or other display utilized at the time of the actual rendering of the service or the obtaining of the goods where the goods or services have been paid for in a prior arranged commercial transaction.

Note that while we have been discussing airlines and rental cars and theaters, this same procedure can be used to obtain merchandise at one point in time where the merchandise has

been preordered and prepaid for and receipts generated at a home or office at a general purpose printer using special paper stock which has been printed on a unique identification code. These codes have been used to create a separate indicia which is coded with a decoding being controlled by a key obtained from the originally printed indicia. Also note that while we have been discussing material forms, this system could work just as well with an electronic display device visual or otherwise where certain portions of the data can be electronically coded and subsequently decoded utilizing a key which is contained in the original information.

FIGURE 7A shows blank stock 70 which has been divided into three sections 71, 72, 73 each having printed thereon an indicia 16, which has a machine readable part and a human readable part. Note that the last two digits in our example 02, 07 and 08 are individual to each form with respect to sections 71, 72 and 73 and need not be in sequential order. These individual last digits could signify the actual sheet number of a form 70 or the individual section number. FIGURE 7B has three more sections 74, 75, 76 and FIGURE 7C has an additional two sections 77, 78. These sections could all be part of one long roll of forms or could be different form sheets with different numbers of blanks thereon.

Turning to FIGURE 8, a user having a sheet of blank form 70 inserted in the user's printer may order a series of tickets for different sporting events, theaters, lotteries and the like. The user upon connection to a common server which serves several different such sporting events may order and pay for the tickets which will printed as discussed above. These are shown in FIGURES 8A and 8B.

Note that indicia 16 can be printed on the sheet and can include either or both machine readable and human readable sections and also this mark may be presented to the users in various forms, one of which could be watermarks built into the paper which could be uniquely identified if desired. Also note that this system could be utilized for printing travelers checks and other commercial paper following the procedures outlined above. These checks would then have printed on them the proper logos and markings for signature by the user when the user utilizes the printed "check" to purchase goods or services. The check would have printed on it the printed indicia as well as the initial indicia so that the acceptor of the travelers check

could, if desired, run the check through a scanner or other reading device to determine the authenticity of the check.

Note also that when a consumer is ordering tickets, the ordering need not be from the same seller but may be from a plurality of sellers. For instance, the user may call for baseball tickets to one seller, football tickets to another and perhaps call for tickets at a distant city. In each case, the seller would utilize the information transmitted by the seller which is unique to the ticket stock currently in the printer. This information would be communicated by the seller's system to a central database to determine what physical position on the ticket stock this particular ticket should be printed and to also determine whether the unique number identified with this ticket has been previously utilized. Thus, user can have printed at their own printers tickets for many diverse events using this system.

Note also that while in the embodiment, the purchaser transmits the unique data pertaining to the stock material to the seller, a system could be devised whereby the unique information is sent by a third party in response to a trigger supplied by the user. This trigger could be automatically generated by the printer scanning the paper and accessing a remote or local data base, or by the data base keeping track of the user's use of the stock and sending the next number in a sequence. The unique code on the stock could, for example, be printed at the time of the transaction under control of a source other than the seller.

Although the present invention and its advantages have been described in detail, it should be understood that various changes, substitutions and alterations can be made herein without departing from the spirit and scope of the invention as defined by the appended claims. Moreover, the scope of the present application is not intended to be limited to the particular embodiments of the process, machine, manufacture, composition of matter, means, methods and steps described in the specification. As one of ordinary skill in the art will readily appreciate from the disclosure of the present invention, processes, machines, manufacture, compositions of matter, means, methods, or steps, presently existing or later to be developed that perform substantially the same function or achieve substantially the same result as the corresponding embodiments described herein may be utilized according to the present

invention. Accordingly, the appended claims are intended to include within their scope such processes, machines, manufacture, compositions of matter, means, methods, or steps.

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100
101
102
103
104
105
106
107
108
109
110
111
112
113
114
115
116
117
118
119
120
121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140
141
142
143
144
145
146
147
148
149
150
151
152
153
154
155
156
157
158
159
160
161
162
163
164
165
166
167
168
169
170
171
172
173
174
175
176
177
178
179
180
181
182
183
184
185
186
187
188
189
190
191
192
193
194
195
196
197
198
199
200
201
202
203
204
205
206
207
208
209
210
211
212
213
214
215
216
217
218
219
220
221
222
223
224
225
226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251
252
253
254
255
256
257
258
259
260
261
262
263
264
265
266
267
268
269
270
271
272
273
274
275
276
277
278
279
280
281
282
283
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
301
302
303
304
305
306
307
308
309
310
311
312
313
314
315
316
317
318
319
320
321
322
323
324
325
326
327
328
329
330
331
332
333
334
335
336
337
338
339
340
341
342
343
344
345
346
347
348
349
350
351
352
353
354
355
356
357
358
359
360
361
362
363
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
392
393
394
395
396
397
398
399
400
401
402
403
404
405
406
407
408
409
410
411
412
413
414
415
416
417
418
419
420
421
422
423
424
425
426
427
428
429
430
431
432
433
434
435
436
437
438
439
440
441
442
443
444
445
446
447
448
449
450
451
452
453
454
455
456
457
458
459
460
461
462
463
464
465
466
467
468
469
470
471
472
473
474
475
476
477
478
479
480
481
482
483
484
485
486
487
488
489
490
491
492
493
494
495
496
497
498
499
500
501
502
503
504
505
506
507
508
509
510
511
512
513
514
515
516
517
518
519
520
521
522
523
524
525
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
545
546
547
548
549
550
551
552
553
554
555
556
557
558
559
560
561
562
563
564
565
566
567
568
569
570
571
572
573
574
575
576
577
578
579
580
581
582
583
584
585
586
587
588
589
590
591
592
593
594
595
596
597
598
599
600
601
602
603
604
605
606
607
608
609
610
611
612
613
614
615
616
617
618
619
620
621
622
623
624
625
626
627
628
629
630
631
632
633
634
635
636
637
638
639
640
641
642
643
644
645
646
647
648
649
650
651
652
653
654
655
656
657
658
659
660
661
662
663
664
665
666
667
668
669
670
671
672
673
674
675
676
677
678
679
680
681
682
683
684
685
686
687
688
689
690
691
692
693
694
695
696
697
698
699
700
701
702
703
704
705
706
707
708
709
710
711
712
713
714
715
716
717
718
719
720
721
722
723
724
725
726
727
728
729
730
731
732
733
734
735
736
737
738
739
740
741
742
743
744
745
746
747
748
749
750
751
752
753
754
755
756
757
758
759
760
761
762
763
764
765
766
767
768
769
770
771
772
773
774
775
776
777
778
779
780
781
782
783
784
785
786
787
788
789
790
791
792
793
794
795
796
797
798
799
800
801
802
803
804
805
806
807
808
809
810
811
812
813
814
815
816
817
818
819
820
821
822
823
824
825
826
827
828
829
830
831
832
833
834
835
836
837
838
839
840
841
842
843
844
845
846
847
848
849
850
851
852
853
854
855
856
857
858
859
860
861
862
863
864
865
866
867
868
869
870
871
872
873
874
875
876
877
878
879
880
881
882
883
884
885
886
887
888
889
890
891
892
893
894
895
896
897
898
899
900
901
902
903
904
905
906
907
908
909
910
911
912
913
914
915
916
917
918
919
920
921
922
923
924
925
926
927
928
929
930
931
932
933
934
935
936
937
938
939
940
941
942
943
944
945
946
947
948
949
950
951
952
953
954
955
956
957
958
959
960
961
962
963
964
965
966
967
968
969
970
971
972
973
974
975
976
977
978
979
980
981
982
983
984
985
986
987
988
989
990
991
992
993
994
995
996
997
998
999
1000
1001
1002
1003
1004
1005
1006
1007
1008
1009
1010
1011
1012
1013
1014
1015
1016
1017
1018
1019
1020
1021
1022
1023
1024
1025
1026
1027
1028
1029
1030
1031
1032
1033
1034
1035
1036
1037
1038
1039
1040
1041
1042
1043
1044
1045
1046
1047
1048
1049
1050
1051
1052
1053
1054
1055
1056
1057
1058
1059
1060
1061
1062
1063
1064
1065
1066
1067
1068
1069
1070
1071
1072
1073
1074
1075
1076
1077
1078
1079
1080
1081
1082
1083
1084
1085
1086
1087
1088
1089
1090
1091
1092
1093
1094
1095
1096
1097
1098
1099
1100
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
1111
1112
1113
1114
1115
1116
1117
1118
1119
1120
1121
1122
1123
1124
1125
1126
1127
1128
1129
1130
1131
1132
1133
1134
1135
1136
1137
1138
1139
1140
1141
1142
1143
1144
1145
1146
1147
1148
1149
1150
1151
1152
1153
1154
1155
1156
1157
1158
1159
1160
1161
1162
1163
1164
1165
1166
1167
1168
1169
1170
1171
1172
1173
1174
1175
1176
1177
1178
1179
1180
1181
1182
1183
1184
1185
1186
1187
1188
1189
1190
1191
1192
1193
1194
1195
1196
1197
1198
1199
1200
1201
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1217
1218
1219
1220
1221
1222
1223
1224
1225
1226
1227
1228
1229
1230
1231
1232
1233
1234
1235
1236
1237
1238
1239
1240
1241
1242
1243
1244
1245
1246
1247
1248
1249
1250
1251
1252
1253
1254
1255
1256
1257
1258
1259
1260
1261
1262
1263
1264
1265
1266
1267
1268
1269
1270
1271
1272
1273
1274
1275
1276
1277
1278
1279
1280
1281
1282
1283
1284
1285
1286
1287
1288
1289
1290
1291
1292
1293
1294
1295
1296
1297
1298
1299
1300
1301
1302
1303
1304
1305
1306
1307
1308
1309
1310
1311
1312
1313
1314
1315
1316
1317
1318
1319
1320
1321
1322
1323
1324
1325
1326
1327
1328
1329
1330
1331
1332
1333
1334
1335
1336
1337
1338
1339
1340
1341
1342
1343
1344
1345
1346
1347
1348
1349
1350
1351
1352
1353
1354
1355
1356
1357
1358
1359
1360
1361
1362
1363
1364
1365
1366
1367
1368
1369
1370
1371
1372
1373
1374
1375
1376
1377
1378
1379
1380
1381
1382
1383
1384
1385
1386
1387
1388
1389
1390
1391
1392
1393
1394
1395
1396
1397
1398
1399
1400
1401
1402
1403
1404
1405
1406
1407
1408
1409
1410
1411
1412
1413
1414
1415
1416
1417
1418
1419
1420
1421
1422
1423
1424
1425
1426
1427
1428
1429
1430
1431
1432
1433
1434
1435
1436
1437
1438
1439
1440
1441
1442
1443
1444
1445
1446
1447
1448
1449
1450
1451
1452
1453
1454
1455
1456
1457
1458
1459
1460
1461
1462
1463
1464
1465
1466
1467
1468
1469
1470
1471
1472
1473
1474
1475
1476
1477
1478
1479
1480
1481
1482
1483
1484
1485
1486
1487
1488
1489
1490
1491
1492
1493
1494
1495
1496
1497
1498
1499
1500
1501
1502
1503
1504
1505
1506
1507
1508
1509
1510
1511
1512
1513
1514
1515
1516
1517
1518
1519
1520
1521
1522
1523
1524
1525
1526
1527
1528
1529
1530
1531
1532
1533
1534
1535
1536
1537
1538
1539
1540
1541
1542
1543
1544
1545
1546
1547
1548
1549
1550
1551
1552
1553
1554
1555
1556
1557
1558
1559
1560
1561
1562
1563
1564
1565
1566
1567
1568
1569
1570
1571
1572
1573
1574
1575
1576
1577
1578
1579
1580
1581
1582
1583
1584
1585
1586
1587
1588
1589
1590
1591
1592
1593
1594
1595
1596
1597
1598
1599
1600
1601
1602
1603
1604
1605
1606
1607
1608
1609
1610
1611
1612
1613
1614
1615
1616
1617
1618
1619
1620
1621
1622
1623
1624
1625
1626
1627
1628
1629
1630
1631
1632
1633
1634
1635
1636
1637
1638
1639
1640
1641
1642
1643
1644
1645
1646
1647
1648
1649
1650
1651
1652
1653
1654
1655
1656
1657
1658
1659
1660
1661
1662
1663
1664
1665
1666
1667
1668
1669
1670
1671
1672
1673
1674
1675
1676
1677
1678
1679
1680
1681
1682
1683
1684
1685
1686
1687
1688
1689
1690
1691
1692
1693
1694
1695
1696
1697
1698
1699
1700
1701
1702
1703
1704
1705
1706
1707
1708
1709
1710
1711
1712
1713
1714
1715
1716
1717
1718
1719
1720
1721
1722
1723
1724
1725
1726
1727
1728
1729
1730
1731
1732
1733
1734
1735
1736
1737
1738
1739
1740
1741
1742
1743
1744
1745
1746
1747
1748
1749
1750
1751
1752
1753
1754
1755
1756
1757
1758
1759
1760
1761
1762
1763
1764
1765
1766
1767
1768
1769
1770
1771
1772
1773
1774
1775
1776
1777
1778
1779
1780
1781
1782
1783
1784
1785
1786
1787
1788
1789
1790
1791
1792
1793
1794
1795
1796
1797
1798
1799
1800
1801
1802
1803
1804
1805
1806
1807
1808
1809
1810
1811
1812
1813
1814
1815
1816
1817
1818
1819
1820
1821
1822
1823
1824
1825
1826
1827
1828
1829
1830
1831
1832
1833
1834
1835
1836
1837
1838
1839
1840
1841
1842
1843
1844
1845
1846
1847
1848
1849
1850
1851
1852
1853
1854
1855
1856
1857
1858
1859
1860
1861
1862
1863
1864
1865
1866
1867
1868
1869
1870
1871
1872
1873
1874
1875
1876
1877
1878
1879
1880
1881
1882
1883
1884
1885
1886
1887
1888
1889
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914
1915
1916
1917
1918
1919
1920
1921
1922
1923
1924
1925
1926
1927
1928
1929
1930
1931
1932
1933
1934
1935
1936
1937
1938
1939
1940
1941
1942
1943
1944
1945
1946
1947
1948
1949
1950
1951
1952
1953
1954
1955
1956
1957
1958
1959
1960
1961
1962
1963
1964
1965
1966
1967
1968
1969
1970
1971
1972
1973
1974
1975
1976
1977
1978
1979
1980
1981
1982
1983
1984
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020
2021
2022
2023
2024
2025
2026
2027
2028
2029
2030
2031
2032
2033
2034
2035
2036
2037
2038
2039
2040
2041
2042
2043
2044
2045
2046
2047
2048
2049
2050
2051
2052
2053
2054
2055
2056
2057
2058
2059
2060
2061
2062
2063
2064
2065
2066
2067
2068
2069
2070
2071
2072
2073
2074
2075
2076
2077
2078
2079
2080
2081
2082
2083
2084
2085
2086
2087
2088
2089
2090
2091
2092
2093
2094
2095
2096
2097
2098
2099
2100
2101
2102
2103
2104
2105
2106
2107
2108
2109
2110
2111
2112
2113
2114
2115
2116
2117
2118
2119
2120
2121
2122
2123
2124
2125
2126
2127
2128
2129
2130
2131
2132
2133
2134
2135
2136
2137
2138
2139
2140
2141
2142
2143
2144
2145
2146
2147
2148
2149
2150
2151
2152
2153
2154
2155
2156
2157
2158
2159
2160
2161
2162
2163
2164
2165
2166
2167
2168
2169
2170
2171
2172
2173
2174
2175
2176
2177
2178
2179
2180
2181
2182
2183
2184
2185
2186
2187
2188
2189
2190
2191
2192
2193
2194
2195
2196
2197
2198
2199
2200
2201
2202
2203
2204
2205
2206
2207
2208
2209
2210
2211
2212
2213
2214
2215
2216
2217
2218
2219
2220

WHAT IS CLAIMED IS:

1. A method for establishing the validity of a display created by a general purpose creation device, said method comprising the steps of:

placing in said device media upon which information may be created, said media having preestablished thereon data which is unique to said media;

5 communicating at least a portion of said preestablished data to a location independent from said device, said independent location operable to create on said media a security indicia, said security indicia created in part by information contained in said preestablished media data and whereby said security indicia is validatable at a subsequent time partially under control of data contained in said preestablished media data.

2. The method of claim 1 wherein said media is paper, and wherein said device is a general purpose printer.

3. The method of claim 2 wherein said paper is divided into sections, each section adapted for printing thereon information pertaining to a different function, each such function having associated therewith a security indicia.

4. The method of claim 3 wherein at least one portion of at least one of said sections contains means for allowing at least that section to become disassociated from the other sections.

5. The method of claim 4 wherein said disassociated section contains means for attaching said section to an object.

6. The method of claim 5 wherein said object is luggage and wherein the material printed on said section includes destination information of said luggage corresponding to destination information printed on at least one other section of said media.

7. The method of claim 5 wherein said attaching means includes a sticky surface selectively exposable by a user of said section.

8. The method of claim 1 wherein created source of ones of said security indicia is validated by key information contained in at least a portion of said preestablished data.

9. The method of claim 7 wherein said key information is contained in a machine readable portion of said preestablished data.

10. Ticket stock for creating thereon human perceivable images, said stock having at least one data source unique to said stock;

wherein said unique data source includes human readable data for communicating to a third party; and

wherein said stock is adapted to accept human readable display material from a remote location, said display material means authenticated under partial control of at least a portion of said unique source data.

11. The stock of claim 10 having separable portions pre-established thereon.

12. The stock of claim 11 wherein different portions of a receipt are printed on selected ones of said portions.

13. The stock of claim 12 wherein at least one of said portions has adhesive on at least a portion thereof.

14. The stock of claim 13 wherein said adhesive is controllably and selectively exposed.

15. The method of displaying on a medium a control indicia, said control indicia operable at the point of commercial use of said media for validating the authenticity of said commercial transaction; said method comprising the steps of:

communicating unique data from the location of said media to a location remote therefrom, said communication being a part of a commercial transaction such that the media will subsequently become the passport to the actual obtaining of commercial services associated with said commercial transaction; and

communicating data from said remote location to said media location, a certain a portion of said data for human readable display in conjunction with said media and a portion of said data being a coded control indicia, said control indicia based at least in part on said communicated unique information.

16. The method of claim 15 further including the step of decoding the control indicia using a portion of said unique data from said display location thereby validating the human readable portion of said display data.

17. The method of claim 15 wherein said media is a printable medium having said unique data preprinted thereon.

18. A system for creating an indicia of value for use at a point of commercial transaction to allow for authentication by a gatekeeper at such transaction point, such authentication verifying that the indicia, which was printed on printable stock by a non-secure printer is, in fact, authentic, said system comprising:

5 means for accepting from a potential user data unique to a particular piece of said printable stock;

a data base;

means for comparing said accepted data with data stored in said database to determine if said unique data had been previously accepted; and

10 means operable under control of said comparing means for providing a set of coded control data for printing on said printable stock, said control data being decodable, in part, under control of key data associated on said printable stock with said unique data.

19. The invention set forth in claim 18 wherein said unique data includes a machine readable portion and a human readable portion.

15 20. The invention set forth in claim 19 wherein said human readable portion is the unique data accepted by said accepting means.

21. The invention set forth in claim 19 wherein said key data is included within said machine readable portion.

22. The invention set forth in claim 18 wherein said data base is common to a plurality of physically diverse accepting means.

23. The invention set forth in claim 18 wherein at least a portion of said unique data is embedded within the printable stock.

24. The invention set forth in claim 23 wherein said embedded data includes a watermark.

25. The invention set forth in claim 18 further including:
means for printing on said printable stock information having a commercial value indicative that the bearer of said printed stock is entitled to a particular good or service.

26. The invention set forth in claim 25 wherein said good or service is the passage via public transportation.

27. The invention set forth in claim 25 wherein said good or service is the passage into an event.

28. The invention set forth in claim 18 further including:
means for printing on said printable stock information having a commercial value indicative that the printed stock is entitled to be treated as commercial paper having the value printed thereon.

29. The method of creating at a purchaser's location a receipt indicative of a prior transaction between the purchaser and a seller of service, said receipt having self proving capability, said method comprising the steps of:

communicating to said seller data which is unique to the material upon which the receipt is to be generated;

said seller verifying satisfaction with said unique data;

said seller communicating to said purchaser display data for associating with said display material, said display material operable at said purchaser's location for creating said receipt; said seller transmitted display data including at least one machine decodable portion, the key to said decodable portion contained within at least a portion of data which is unique to said receipt material.

30. The method of claim 29 wherein said unique data is preassociated with said receipt material.

31. The method of claim 29 wherein said unique data is printed on said receipt material, and contains both a human readable portion and a machine readable portion.

32. The method of claim 29 wherein said receipt material is stock printable from a printer located at the purchaser's location.

33. The method of claim 32 wherein said unique data is established on said printable stock prior to said communication with said seller.

34. The method of claim 33 wherein said stock has multiportions and wherein said method is operable for printing different data on selected portions of said stock.

35. The method of claim 34 wherein at least one of said portions is a luggage ticket and another of said portions is a boarding pass.

36. The method of claim 29 wherein said verifying step includes checking to insure that the unique data is not a duplicate.

37. The method of claim 32 wherein said checking step is local to said seller.

38. The method of claim 32 wherein said checking step is remote to said seller and shared between a plurality of other sellers all having the possibility of communication access with said purchaser from time to time.

39. The method of claim 29 wherein said purchaser may have communication access to a plurality of sellers, each seller having the capability of sending different display data.

40. The method of claim 29 wherein said verifying step includes accessing a data base common to all of said sellers.

41. The method of claim 29 further including the step of:
transmitting from the seller to a transaction data base data pertaining to the transaction which is the subject of said receipt.

42. The method of claim 29 further including the steps of:

presenting said receipt to a gatekeeper at a transaction location; and

said gatekeeper verifying the authenticity of said receipt under control of data which is unique to said receipt.

43. The method of claim 42 wherein said gatekeeper verification step includes the step of:

obtaining said key from said unique data.

44. The method of authenticating data on a transaction receipt, said method comprising the steps of:

presenting said receipt to a gatekeeper; and

said gatekeeper authenticating said receipt by decoding a portion of data contained on said receipt under control of a decode key contained within data unique to said receipt.

45. The method of claim 44 wherein said decode key is machine readable.

46. The method of claim 45 wherein said machine readable key is preprinted on said receipt prior to the printing thereon of said receipt data.

47. The method of claim 44 wherein said authenticating step includes the step of determining if this receipt is expected within the presentation parameters.

48. The system of creating a purchaser's location a receipt indicative of a prior transaction between the purchaser and a seller of service, said receipt having self proving capability, said system comprising:

means for communicating to said seller data which is unique to the material upon
5 which the receipt is to be generated;

means associated with said seller for verifying satisfaction with said unique data and for said seller communicating to said purchaser display data for associating with said display material, said display material operable at said purchaser's location for creating said receipt; said seller transmitted display data including at least one machine decodable portion, the key
10 to said decodable portion contained within at least a portion of data which is unique to said receipt material.

49. The system of claim 48 wherein said unique data is preassociated with said receipt material.

50. The system of claim 49 wherein said unique data is printed on said receipt material, and contains both a human readable portion and a machine readable portion.

51. The system of claim 49 wherein said receipt material is stock printable from a printer located at the purchaser's location.

52. The system of claim 48 wherein said unique data is established on said printable stock prior to said communication with said seller.

53. The system of claim 48 wherein said verifying means includes means for checking to insure that the unique data is not a duplicate.

54. The system of claim 53 wherein said checking means is local to said seller.

55. The system of claim 53 wherein said checking means is remote to said seller and shared between a plurality of other sellers all having the possibility of communication access with said purchaser from time to time.

56. The system of claim 48 wherein said purchaser may have communication access to a plurality of sellers, each seller having the capability of sending different display data.

57. The system of claim 48 wherein said verifying means includes means for accessing a data base common to all of said sellers.

58. The system of claim 48 further including:

means for transmitting from the seller to a transaction data base data pertaining to the transaction which is the subject of said receipt.

59. The system of claim 48 further including:

presenting said receipt to a gatekeeper at a transaction location; said gatekeeper enabling means for verifying the authenticity of said receipt under control of data which is unique to said receipt.

60. The system of claim 59 wherein said last-mentioned verifying means includes obtaining said key from said unique data.

61. The system of authenticating data on a transaction receipt, said system comprising

means for presenting said receipt to a gatekeeper; and

means under control of said gatekeeper for authenticating said receipt by decoding a portion of data contained on said receipt under control of a decode key contained within data unique to said receipt.

62. The system of claim 61 wherein said decode key is machine readable.

63. The system of claim 61 wherein said machine readable key is preprinted on said receipt prior to the printing thereon of said receipt data.

64. The system of claim 61 wherein said authenticating means includes:
means for determining if this receipt is expected within the presentation parameters.

VERIFYING THE AUTHENTICITY OF PRINTED DOCUMENTS**ABSTRACT OF THE DISCLOSURE**

Preprinted forms are used in a general purpose printing device to allow for the subsequent verification of the authenticity of a printed document such as a ticket for transportation services. In operation, the user accesses the seller of the goods/services and during an information exchange with the seller the user inputs at least a portion of the preprinted data from the form. The seller then uses this information to formulate a printable control indicia which is then printed on the form at the user's location. When the form is subsequently presented to the seller, for example when the user attempts to board an aircraft using the form he/she printed, the preprinted portion of the form is used to obtain a decipher key which in turn is used to decipher the control indicia. Inability to decode the control indicia indicates that the printed material on the form may not be authentic.

6/2/99

FIG. 1

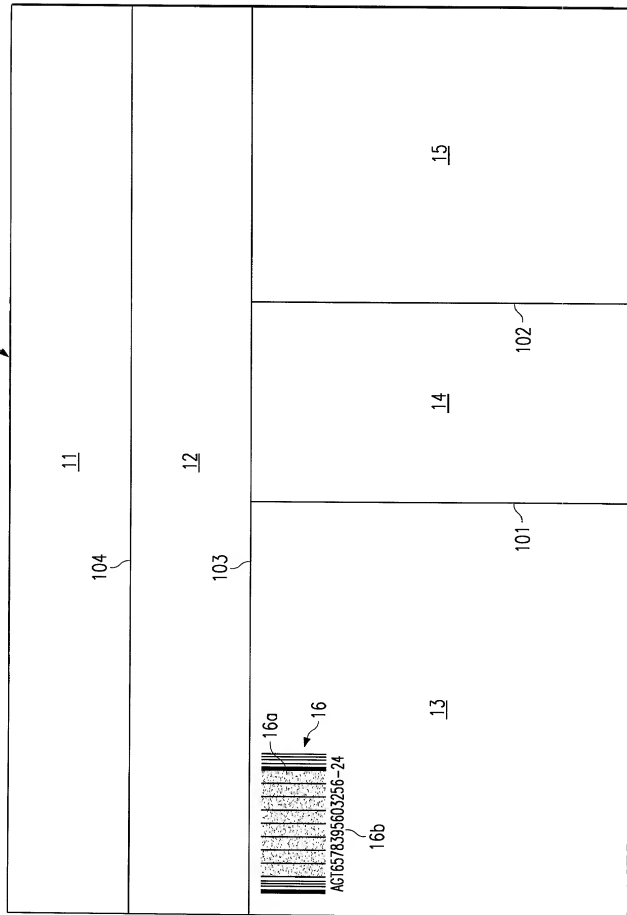







FIG. 2

<p>Mr. Salim G. Kara 1234 Anystreet City, Ont. Canada L3X 7Y4 Tel. YY/707-XXXX</p>	<p>11 21</p>	<p>AIR LINE  HOUSTON IAB # 825-05/05/99</p> <p>PRIORITY</p>
<p>Mr. Salim G. Kara 1234 Anystreet City, Ont. Canada L3X 7Y4 Tel. YY/707-XXXX</p>	<p>12 21</p>	<p>AIR LINE  HOUSTON IAB # 825-05/05/99</p> <p>PRIORITY</p>
<p>16b 16 AG16578395603256-24</p> <p>AIR LINE </p> <p>Boarding Pass</p> <p>Date: May 5, 1999 Flight # 825 Departure: 08:45 Gate 97 From: Toronto-YYZ To: Houston IAB</p> <p>Passenger: Mr. Salim G. Kara Super Elite # XXX-011-YYY SEAT # 1D</p>	<p>21</p>	<p>21</p>
<p>101</p> <p>AIR LINE </p> <p>Boarding Pass Passenger Copy</p> <p>May 5, 1999 102 825 Toronto YYZ to Houston IAB</p> <p>Mr. Salim G. Kara Super Elite SEAT # 1D</p>	<p>21</p>	<p>AIR LINE </p> <p>Receipt: 16543987689 Fare: CAD \$ 1,850.00 Tax: CAD \$ 15.35 Tax: USH \$ 23.65 TOTAL: CDN \$ 1,889.00</p> <p>Return 1 year open Paid in full AMEX CCC-986656-25302 Passenger: Mr. Salim G. Kara Date: May 5, 1999 Flight # 825 From: Toronto YYZ To: Houston IAB Seat # 1D</p>

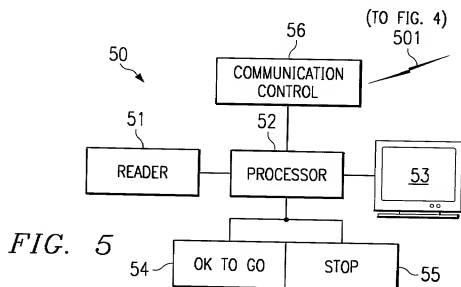
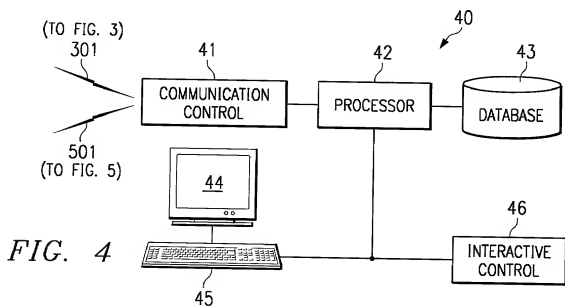
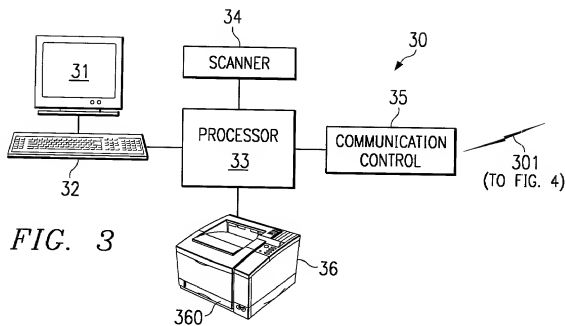


FIG. 6

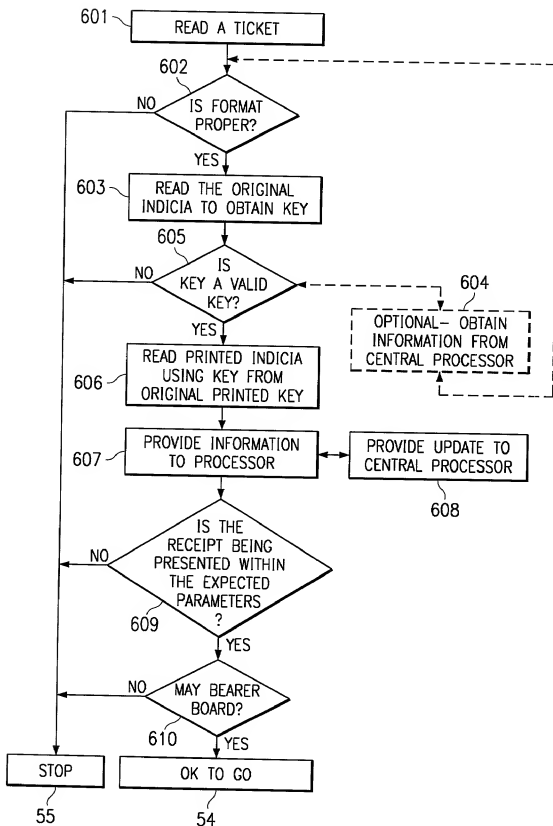


FIG. 7A

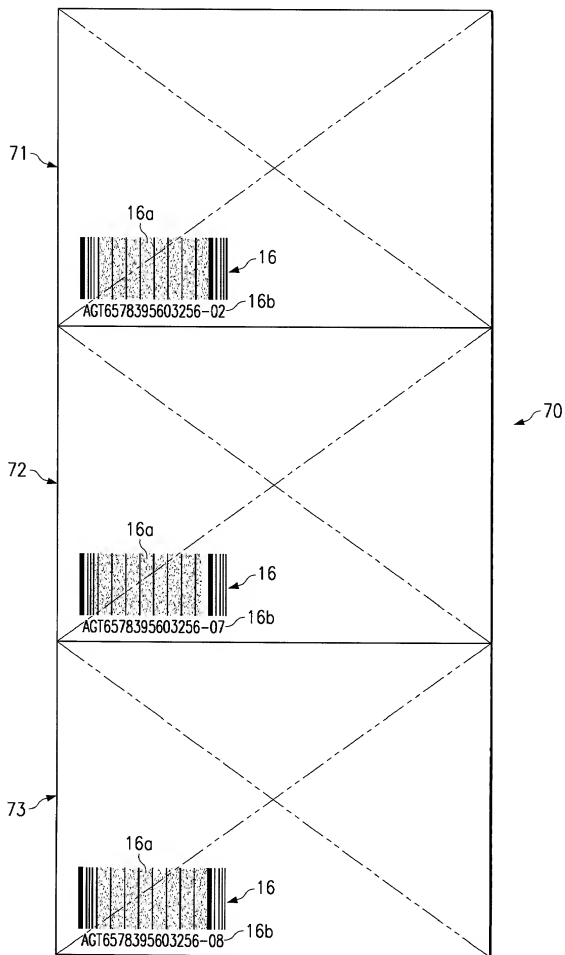


FIG. 7B

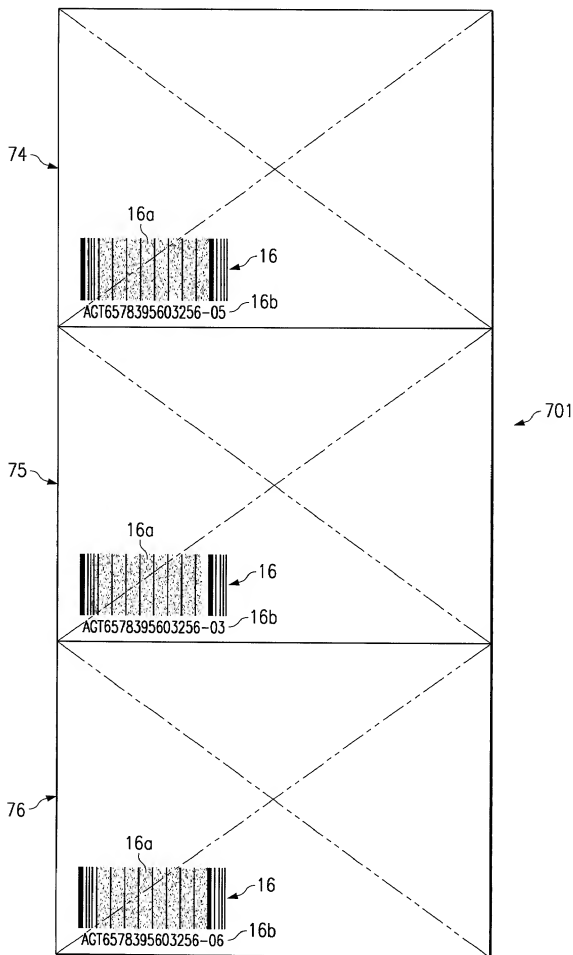


FIG. 7C

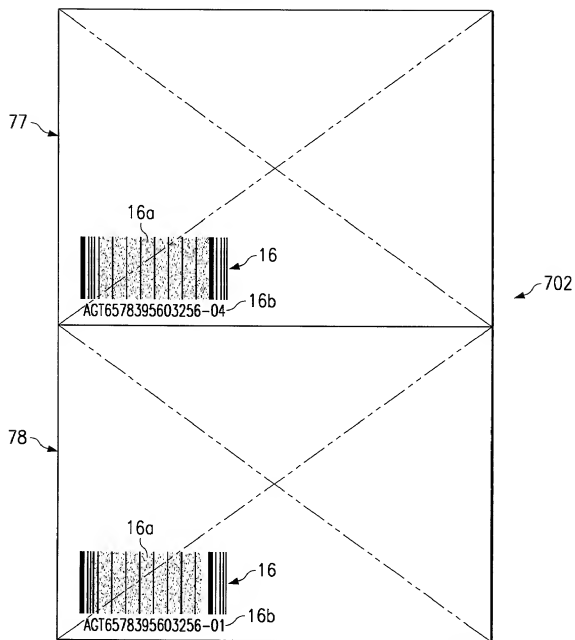


FIG. 8A

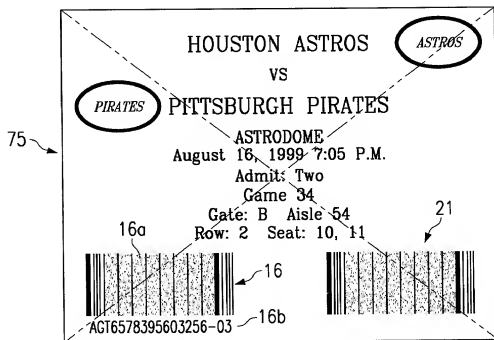


FIG. 8B

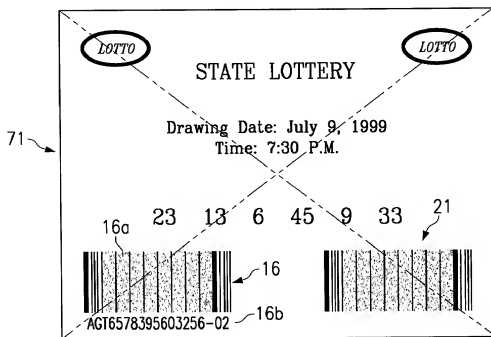


FIG. 8C

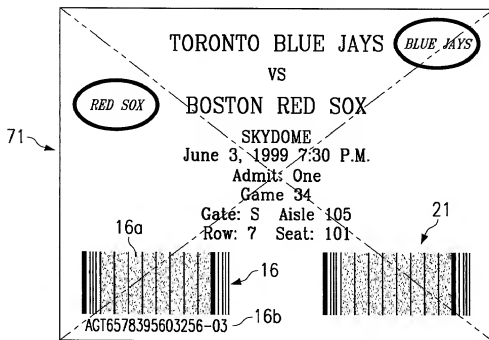
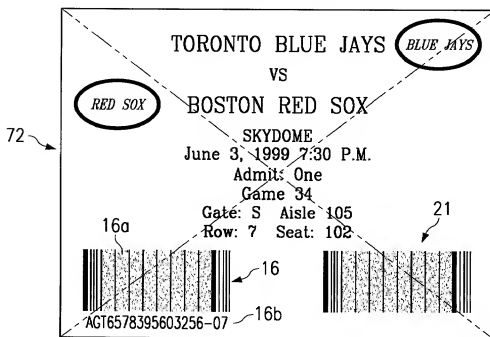


FIG. 8D



COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT, SUPPLEMENTAL, DIVISIONAL,
CONTINUATION, OR C-I-P)

As a below named inventor, I hereby declare that:

TYPE OF DECLARATION

This declaration is of the following type:

- ☒ original.
☐ design.
☐ supplemental.
☐ national stage of PCT.
☐ divisional.
☐ continuation.
☐ continuation-in-part (C-I-P).

INVENTORSHIP IDENTIFICATION

My residence, post office address and citizenship are as stated below, next to my name. I believe that I am the original, first and sole inventor (*if only one name is listed below*) or an original, first and joint inventor (*if plural names are listed below*) of the subject matter that is claimed, and for which a patent is sought on the invention entitled:

TITLE OF INVENTION**VERIFYING THE AUTHENTICITY OF PRINTED DOCUMENTS****SPECIFICATION IDENTIFICATION**

The specification of which:

- (a) ☒ is attached hereto.
(b) ☐ was filed on _____, as ☐ Serial No. 0 / _____ or
☐ _____ and was amended on _____ (*if applicable*).
(c) ☐ was described and claimed in PCT International Application No. _____ filed on
_____ and as amended under PCT Article 19 on _____ (*if any*).

SUPPLEMENTAL DECLARATION (37 CFR 1.67(b))

☐ I hereby declare that the subject matter of the

☐ attached amendment

☐ amendment filed on _____.

was part of my/our invention and was invented before the filing date of the original application, above identified, for such invention.

ACKNOWLEDGMENT OF REVIEW OF PAPERS AND DUTY OF CANDOR

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information, which is material to patentability as defined in 37, Code of Federal Regulations, § 1.56,

☐ in compliance with this duty, there is attached an information disclosure statement, in accordance with 37 CFR 1.98.

PRIORITY CLAIM (35 U.S.C. § 119(a)-(d))

I hereby claim foreign priority benefits under Title 35, United States Code, § 119(a)-(d) of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

(d) ☐ no such applications have been filed.

(e) ☐ such applications have been filed as follows.

**PRIOR FOREIGN/PCT APPLICATION(S) FILED WITHIN 12 MONTHS
(6 MONTHS FOR DESIGN) PRIOR TO THIS APPLICATION
AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. § 119(a)-(d)**

COUNTRY (OR INDICATE IF PCT)	APPLICATION NUMBER	DATE OF FILING DAY, MONTH, YEAR	PRIORITY CLAIMED UNDER 35 USC 119	
			<input type="checkbox"/> Yes	<input type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No
			<input type="checkbox"/> Yes	<input type="checkbox"/> No

CLAIM FOR BENEFIT OF PRIOR U.S. PROVISIONAL APPLICATION(S)

(35 U.S.C. § 119(e))

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below:

PROVISIONAL APPLICATION NUMBER**FILING DATE**

_____/_____
 _____/_____
 _____/_____

**CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S)
 UNDER 35 U.S.C. § 120**

☐ The claim for the benefit of any such applications are set forth below:

APPLICATION SERIAL	FILING DATE	STATUS

**ALL FOREIGN APPLICATION(S), IF ANY, FILED MORE THAN 12 MONTHS
 (6 MONTHS FOR DESIGN) PRIOR TO THIS U.S. APPLICATION**

POWER OF ATTORNEY

I hereby appoint the following practitioner(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

David H. Tannenbaum, Reg. No. 24,745;
 Michael A. Papalas, Reg. No. 40,381;
 R. Ross Viguet, Reg. No. 42,203;
 Michael J. Fogarty, III, Reg. No. 42,541;
 Brian A. Carlson, Reg. No. 37,793,
 Jody Bishop, Reg. No. 44,034

SEND CORRESPONDENCE TO

DIRECT TELEPHONE CALLS TO:

David H. Tannenbaum
 FULBRIGHT & JAWORSKI L.L.P.
 2200 Ross Avenue, Suite 2800
 Dallas, Texas 75201.

David H. Tannenbaum
 (214) 855-8334

DECLARATION

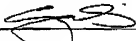
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

SIGNATURE(S)

NOTE: Carefully indicate the family (or last) name, as it should appear on the filing receipt and all other document.

Full name of sole or first inventor: Salim G. Kara

Inventor's signature

 G. KARA

Country of Citizenship: Canada

Date:

June 2, 1998

Residence: 17 Bayview Forest Lane, Thornhill, Ontario, Canada L3T7S4

Post Office Address: 17 Bayview Forest Lane, Thornhill, Ontario, Canada L3T7S4